

CLEANING

Use only soap and water to clean the WORKMATE®. Dry metal parts thoroughly.

STORAGE

A keyhole slot in the base of the WORKMATE® permits hanging it on a sturdy nail or screw driven into a substantial wall or support.

WORKMATE® Attachments (available at extra cost)

Cat. No. 79-010 Pkg. of 2 Swivel Pegs Figure 27. For additional versatility in holding objects, or for replacing pegs.

Cat. No. 79-016 Pkg. of 2 CLAMPS. See Figure 28. Quickly clamps parts on a horizontal surface for gluing, sawing, sanding, etc. Fits into holes on WORKMATE® or any other work surface with 20mm hole. Clamps material up to 3/4" thick, can be rotated. Does not mar work surface.

Cat. No. 79-013 ROUTER AND SHAPE GUIDE. See Figure 29. Use with all B&D Routers or any other consumer type Router with a 6" or less diameter base plate and 3 equally spaced mounting screws not larger than 3/16" diameter. Holds Router rigidly, work is guided by fence. Use for routing edges, beading, free-hand routing, etc. Maximum wood thickness 1 1/2", maximum diameter of cutter 1".

Cat. No. 79-015 DRILL GUIDE. Holds Black & Decker and most other drills securely for vertical or 0° to 90° angular drilling. Use freehand for accurate angles, or horizontally in WORKMATE® to hold drill for buffing, sanding jobs.

CAUTION: Recommended accessories and attachments for your WORKMATE® are listed above or described elsewhere in this manual. The use of any other accessory or attachment might be hazardous.

IMPORTANT

To assure product SAFETY and RELIABILITY repairs, maintenance and adjustment should be performed by BLACK & DECKER Service Centers or other qualified service organizations, always using BLACK & DECKER replacement parts.

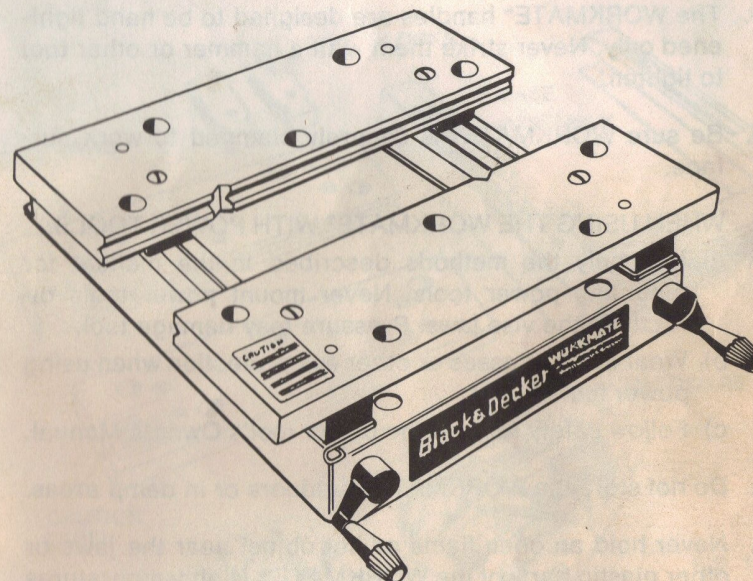
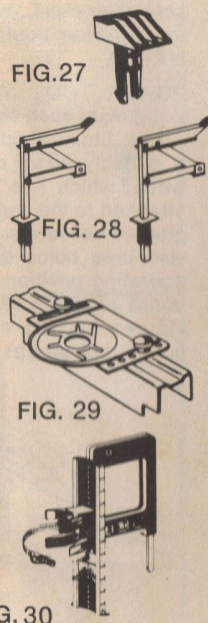
HOME USE WARRANTY (A Full One Year Warranty)

Black & Decker warrants this product for one year. We will repair, without charge, any defects due to faulty material or workmanship or at our option replace the product free. Please return the complete unit, transportation prepaid, to any Black & Decker Service Center or Authorized Service Station listed under "Tools Electric" in the yellow pages. This warranty does not apply to accessories. This warranty gives you specific legal rights and you may have other rights which vary from state to state. Should you have any questions, contact your nearest Black & Decker Service Center Manager.

BLACK & DECKER (U.S.) INC.
CONSUMER PRODUCTS DIVISION
515 GLEBE RD., EASTON, MD. 21601

Black & Decker OWNER'S MANUAL

WORKMATE® Standard 16" Benchtop Work Center and Vise Non-Tilt Model 79-023



- Can be mounted with included clamps on work surfaces up to 2 1/2" thick. Rubber feet provided in parts bag minimize marring of the work surface.
 - Unit can be used at any place on workbench surface permanently mounted in place using clamps provided or bolting directly to workbench surface.
 - 16" vise jaws open up to 5 1/4" wide.
 - Swivel pegs hold irregular shape and lumber up to 12" wide, up to 14" diagonally.
 - V-grooves in vise jaws hold pipe or tubing in horizontal or vertical positions.
 - Can be hung on wall or stored under workbench when not in use.
 - Some assembly is required, please read Owners Manual carefully for proper assembly.
- Please read this manual carefully so that you can take full advantage of the versatility of the WORKMATE®
- SAVE MANUAL FOR FUTURE REFERENCE.

SAFETY RULES

1. Do not load the WORKMATE® with more than 350 pounds.
2. Do not apply an unbalanced load which could cause the WORKMATE® to tip.
3. Do not use the WORKMATE® as a step ladder or standing platform.
4. The WORKMATE® handles are designed to be hand tightened only. Never strike them with a hammer or other tool to tighten.
5. Be sure WORKMATE® is securely clamped to work surface.
6. WHEN USING THE WORKMATE® WITH POWER TOOLS:
 - a) Use only the methods described in the manual for mounting power tools. Never mount power tools directly in the vise jaws. Pressure may damage tool.
 - b) Wear safety glasses or other eye protection when using power tools.
 - c) Follow safety rules in the power tool's Owners Manual.
7. Do not store the WORKMATE® outdoors or in damp areas.
8. Never hold an open flame or hot object near the jaws or other plastic parts of the WORKMATE®. High temperatures can damage these materials.

COVERED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS 3,615,087; 3,841,619; 4,034,684; 4,076,229; 4,127,260; 4,140,309; 4,154,435; 4,155,386; 4,157,174; 4,159,821; 4,169,606; 4,243,212; 230,801; 243,820; D250,079; 4,248,411; 4,265,436; PAT. PEND.; CORRESPONDING PATENTS IN OTHER COUNTRIES.

BEFORE ASSEMBLY

Important: Read all instructions fully and carefully before assembling.

Suggested Tool for Assembly:

Medium/Large Flat Blade Screw Driver.

Check box contents carefully for the following:

Items (See Figure 1 for pictorial representation)

Quantity	Item	Part No.
(2)	Vise Jaws (front & rear)	134362-02
(1)	Base Assembly	680706
(1)	Hardware Bag	680097-01
(4)	Jaw Blocks	680853

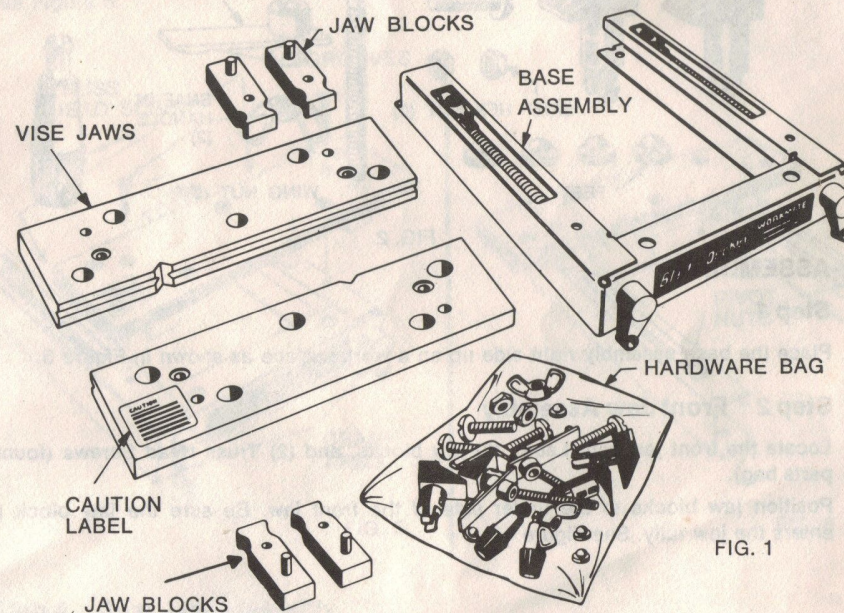


FIG. 1

Check hardware bag contents carefully for the following items:

(See Figure 2 for a pictorial representation)

Quantity	Item	Part No.
(4)	Swivel Pegs	135693
(4)	Feet	680704
(4)	Truss Hd. Screws 5/16"x 1 13/16"	680861
(2)	Clamp Rods	680699
(2)	Clamp Blocks	680101
(2)	Wing Nuts	82004
(2)	Snap in Handles	680703
(2)	5/16" Hex Nuts	99366-04

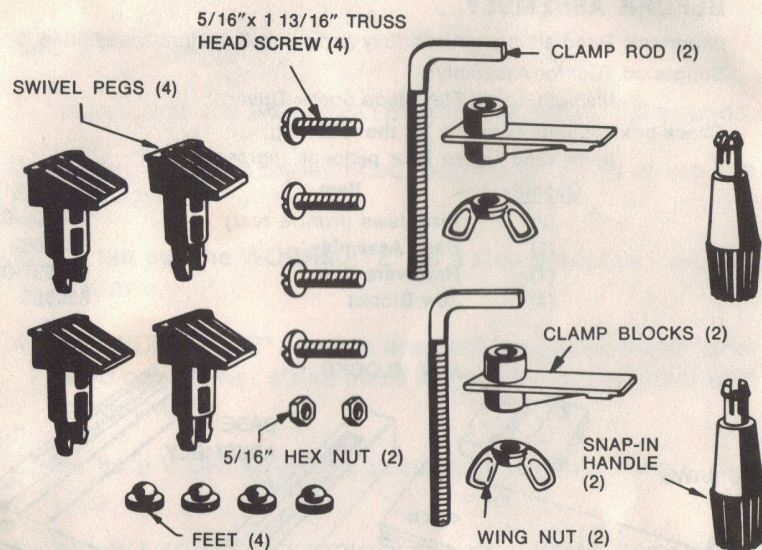


FIG. 2

ASSEMBLY

Step 1

Place the base assembly right side up on a work surface as shown in Figure 3.

Step 2 Front Jaw Assembly

Locate the front jaw with Label, (2) jaw blocks, and (2) Truss Head Screws (found in parts bag).

Position jaw blocks to the under side of the front jaw. Be sure the jaw block post enters the jaw fully. See Figure 4.

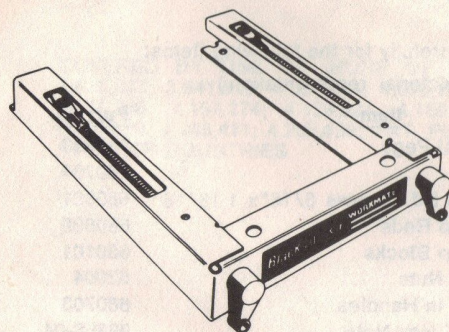


FIG. 3

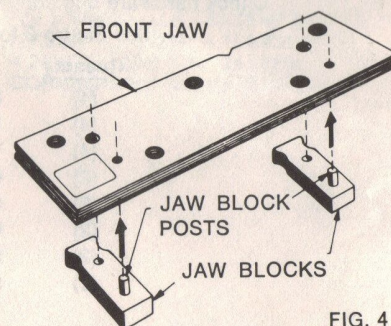


FIG. 4

Place jaw and block assembly on crank arm end of base assembly. Be sure the "V" groove of the jaw is pointing to the rear of the base assembly. Insert into the jaw mounting holes the two Truss Head Screws. The screws should pass thru the jaw, thru the jaw block holes and into the threaded holes located near the front of the base assembly. See Figure 5.

Carefully engage screw threads into threaded holes and tighten securely using a medium/large flat blade screw driver.

Step 3

Rotate the base assembly such that the rear (open end) of the base assembly is nearest you. Position pivot nuts into base assembly grooves and rotate crank arms until pivot nuts are located in approximately the extreme end of base slot and nearest you. See Figure 6.

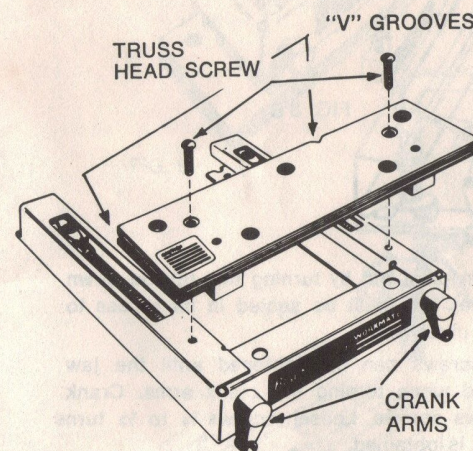


FIG. 5

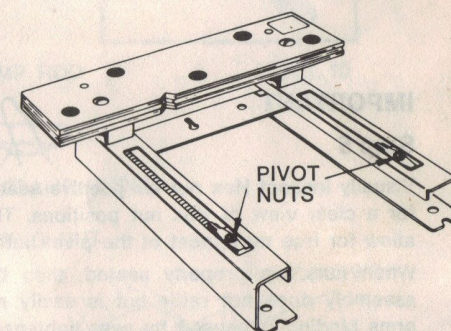


FIG. 6

Step 4 Rear Jaw Assembly

Locate rear jaw, (2) jaw blocks, (2) Truss Head Screws and (2) Hex nuts found in parts bag.

Assemble jaw blocks to jaw in similar manner as described in Step 2 and Figure 4.

Place jaw and block assembly on the rear of the base assembly directly above the pivot nuts. Be sure the "V" groove of the rear jaw is pointing toward the front jaw.

Place a Hex nut into the right pivot nut recessed groove and hold in place with a finger as shown (See Figure 7).

Insert a Truss Head screw thru the jaw hole, thru the jaw block and into the pivot nut hole. Engage the screw into the nut held by the finger. Do not tighten at this time. See Figure 8A and 8B.

Proceed to assemble the remaining Truss Head screw into left hand jaw hole, jaw block, pivot nut and Hex nut as described for the right hand assembly. Do not tighten at this time.

HEX NUT

FIG. 7

FIG. 8 A

FIG. 8 B

IMPORTANT

Step 5

Visually inspect Hex nut for positive seating in pivot nut by turning unit upside down for a clear view of Hex nut positions. The Hex nut must be seated in its recess to allow for free movement of the pivot nut and pivot screw.

When nuts are properly seated, then the screws can be tightened until the jaw assembly does not rattle but is easily moved when turning the crank arms. Crank arms binding is caused by over tightened jaws screws. Loosen screws $\frac{1}{4}$ to $\frac{1}{2}$ turns until the smooth, easy turning of crank arms is obtained.

Step 6

Locate feet from parts bag and insert into holes provided — See Figure 9.

Insert the rounded end of foot into base hole and firmly seat foot against base surface.

Turn assembled unit right side up and sit on workbench surface. Locate swivel pegs and snap in handles and insert each part into unit as shown in Figure 10.

This unit is now completely assembled.

CLAMP DOWN ASSEMBLY

To mount your Standard 16" benchtop to the work surface (thickness not to exceed 2.5"), clamps are provided but must be assembled.

Locate clamp rod, clamp blocks and wing nuts found in parts bag and assemble as shown in Figure 11. It is important that the clamp block is positioned on clamp rod as shown.

BENCH MOUNTING

The WORKMATE® may be clamped at any location along the front or at either corner of any work surface up to $2\frac{1}{2}$ " thick. See Figure 12 and 13.

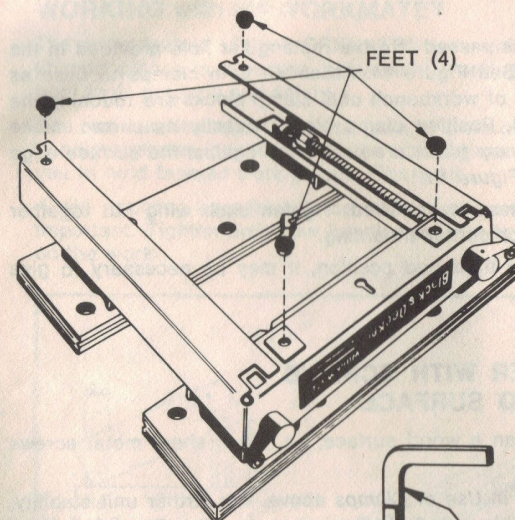


FIG. 9

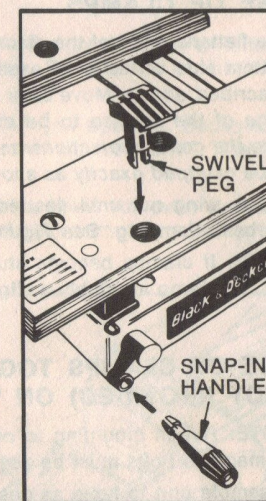


FIG. 10

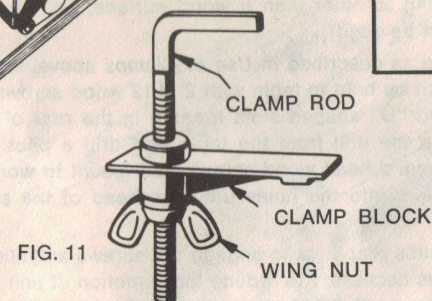


FIG. 11

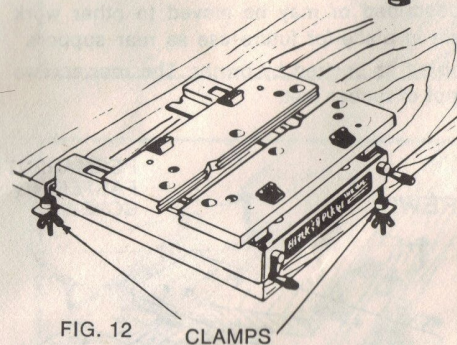


FIG. 12

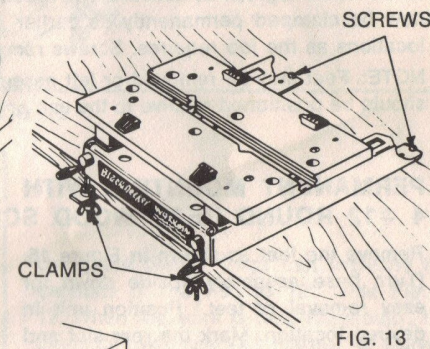


FIG. 13

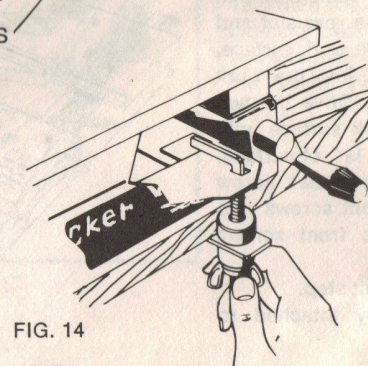


FIG. 14

USE OF CLAMPS

The flattened end of the clamp rod is passed into the rectangular hole provided in the bottom side of the base assembly. See Figure 14. Assemble both clamps to base as described above. Move base to rear of workbench until clamp blocks are touching the edge of the surface to be clamped. Position clamp blocks exactly as shown. *Make sure the collar projections on the clamp block are positioned against the surface edge to be clamped exactly as shown in Figure 14.*

Rotate wing nut until desired tightness is achieved. Tighten each wing nut together for best clamping. See Figure 12 for corner mounting.

NOTE: If clamps become stuck into tightened position, it may be necessary to give clamp assembly a slight tap.

USE OF CLAMPS TOGETHER WITH SCREWS (NOT PROVIDED) ON WOOD SURFACE

NOTE: (When mounting to other than a wood surface, i.e. steel, sheet metal screws or machine bolts must be used).

Assemble unit to table as described in *Use of Clamps* above. For further unit stability, the rear of the unit can be held to table with 2 #12 wood screws. See Figure 13. Mark the position of the two "U" shaped slots located in the rear of the unit, on the work table surface. Remove the unit from the table and drill a pilot hole # $\frac{1}{8}$ " at each mark. Obtain 2 #12 round head wood screws and mount to work surface in the holes drilled. Drive the screws into the holes until the head of the screw is within $\frac{1}{8}$ " of workbench surface.

Position assembled unit's rear slots to engage the screws and slide the unit under each screw head. Tighten as necessary to reduce loose motion of unit but not tight. Unit may now be clamped permanently as earlier described or may be moved to other work locations as the job requires. Screws remain in place for future use as rear support.

NOTE: Feet may be removed or left assembled as desired by owner. The rear screws should be positioned relative to the use or not of rubber feet.

PERMANENT MOUNTING WITH 4 #12 ROUND HEAD WOOD SCREWS

Remove the feet as shown in Figure 15. (Turn base assembly upside down for easy removal of feet.) Position unit in desired location. Mark the rear slot and front hole locations on the work surface. Drill a pilot hole # $\frac{1}{8}$ " into the work surface in each location. Drive the two rear screws into the work surface until the screw head is within $\frac{1}{8}$ " of surface. Position unit base slots under screw heads. Insert the two front screws into position and secure the front screws tight.

Tighten rear screws as last step.

Unit is now permanently attached to work surface.

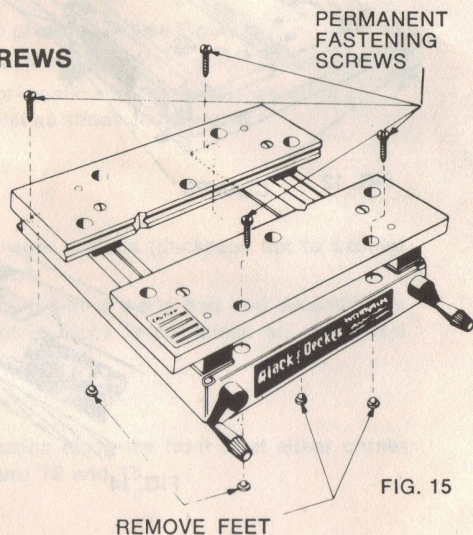


FIG. 15

WORKING with the WORKMATE®

The prime feature of the WORKMATE® is its ability to hold a great variety of differently shaped pieces in a secure, convenient working position. Both hands remain free to hold tools properly and safely.

The two handles adjust the vise jaws to a maximum $5\frac{1}{4}$ " jaw opening. Because each handle operates independently, the opening can be tapered from 0" to 4". This allows you to hold tapered work pieces Figure 16.

Avoid applying excessive force when tightening the vise jaws. An even pressure is important. Tighten both vise handles so that they exert approximately equal pressure on the work.

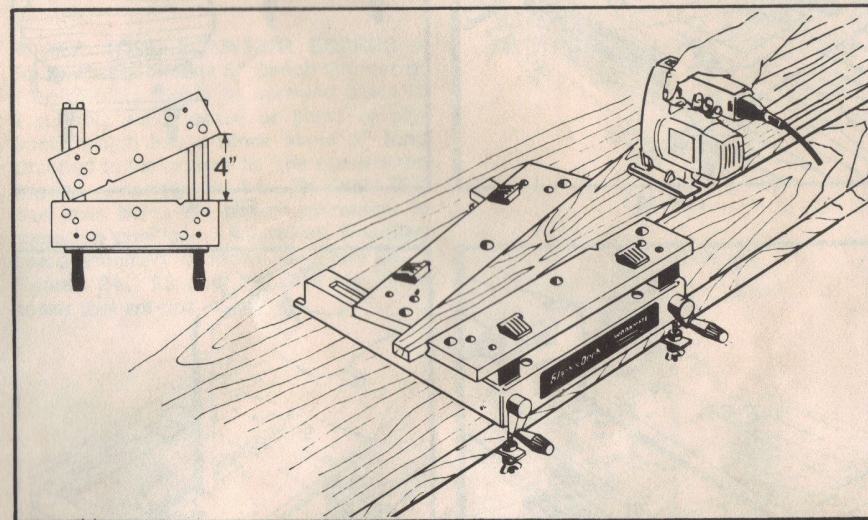


FIG. 16

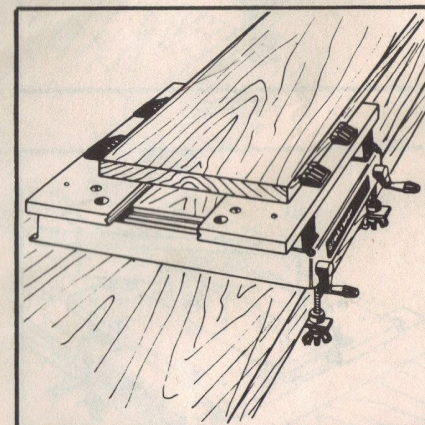


FIG. 17

Using the Swivel Pegs can increase the capacity of the vise to 12" wide Figure 17. When the work is held diagonally, the capacity becomes 14" Figure 18. Curved and Irregular shapes can also be held by the Swivel Pegs Figure 19 oval and irregular.

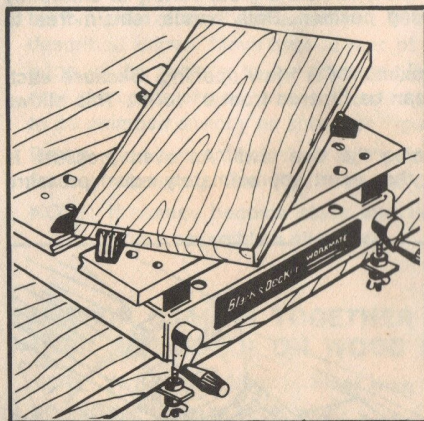


FIG. 18

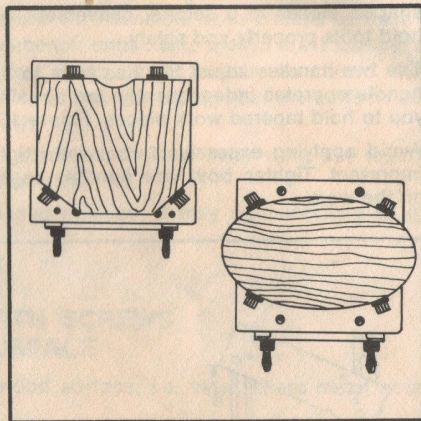


FIG. 19

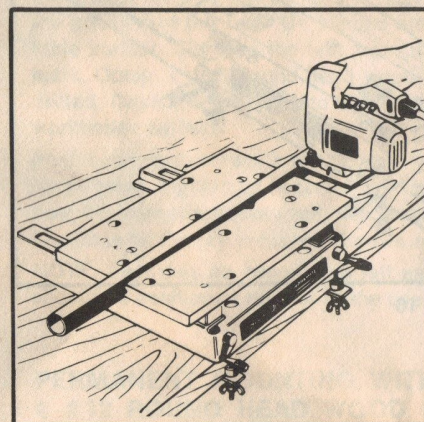


FIG. 20

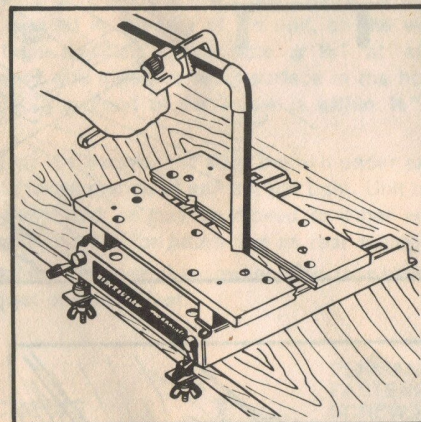


FIG. 21

Sawing tubular pieces is easy when they are held horizontally in the V-Grooves running along the faces of the vise jaws Figure 20. Vertical V-Grooves in the jaws permit tubular pieces to be held vertically Figure 21.

A mitre box can be held between the Swivel Pegs for accurate angle sawing. Figure 22.

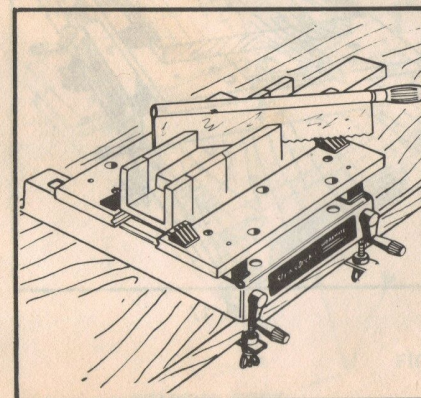


FIG. 22

USING STATIONARY POWER TOOLS and POWER TOOL STANDS

Construct individual mounting boards for the above equipment, which can be moved on or off of the WORKMATE® as required.

CAUTION: The equipment should be securely attached to a mounting board with screws or bolts. Wear safety glasses when using power equipment with the WORKMATE®.

POWER TOOL MOUNTING BOARDS.— Equipment such as a 5" Bench Grinder or a Drill Stand should be screwed down to a suitably sized board or piece of plywood, which has a block about 6" long attached to the underside. The block when gripped securely in the WORKMATE® vise jaws holds the power equipment in operating position. A suggested mounting board assembly is shown in Figure 23. Figures 24, 25 and 26 illustrate three power tool set-ups.

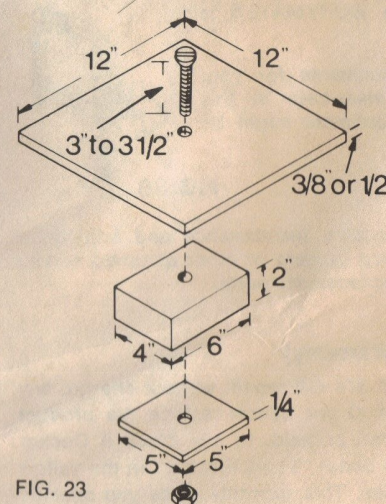


FIG. 23

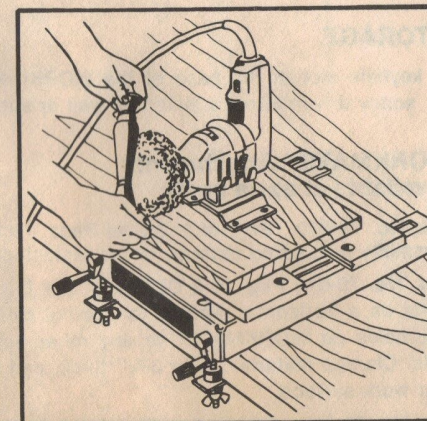


FIG. 24

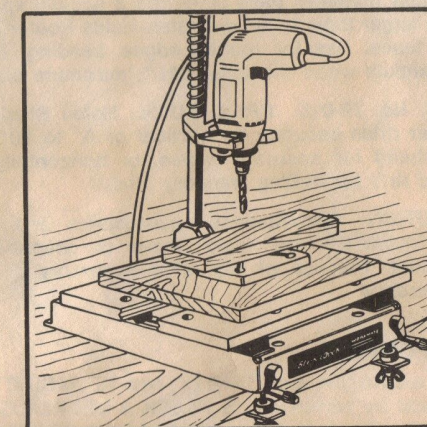


FIG. 25

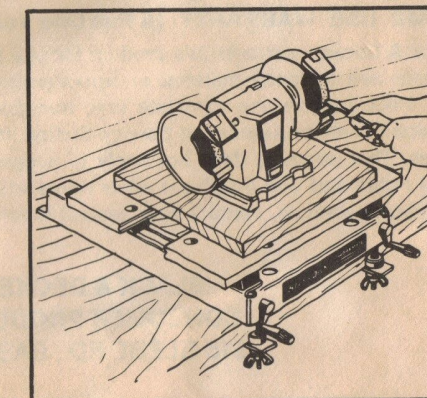


FIG. 26